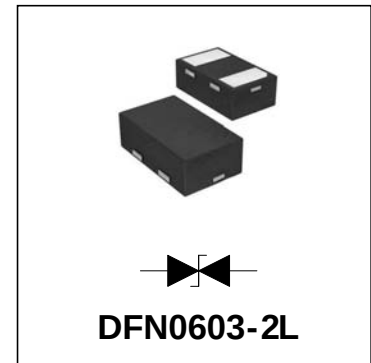


Features

- Protects one I/O or power line
- Low Clamping Voltage
- Ultra Low Capacitance:0.35pF
- Working Voltage:1.0V
- Low Leakage Current
- Response Time is Typically < 1 ns



IEC COMPATIBILITY (EN61000-4)

- IEC 61000-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 15\text{kV}$ (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 4 A (8/20 μs)

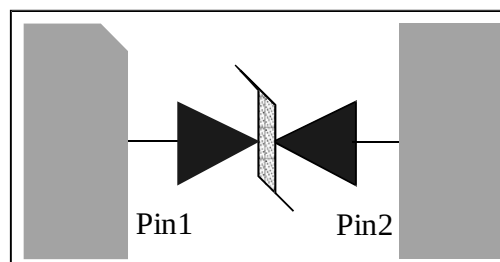
Mechanical Characteristics

- DSN2 package
- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel per EIA 481
- RoHS/WEEE Compliant

Applications

- Thunderbolt
- USB 3.0/3.1
- USB Type-C
- Consumer electronics

Schematic & PIN Configuration

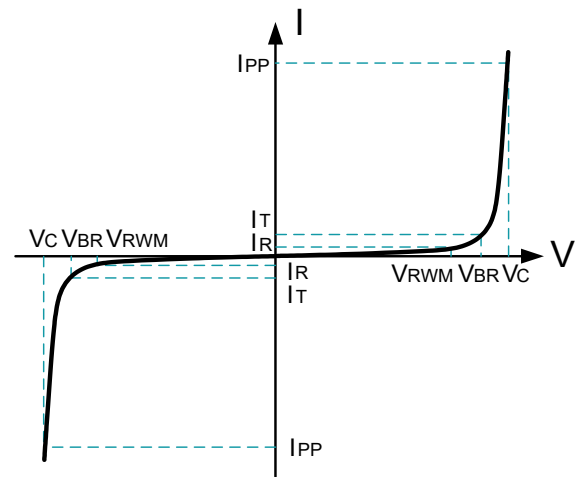


Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p=8/20\mu s$)	P_{PP}	25	Watts
Peak Pulse Current ($t_p=8/20\mu s$)(note1)	I_{PP}	4	A
ESD per IEC 61000-4-2(Air) ESD per IEC 61000-4-2(Contact)	V_{ESD}	15 15	kV
Lead Soldering Temperature	T_L	260(10seconds)	$^{\circ}C$
Junction Temperature	T_J	-55 to + 125	$^{\circ}C$
Storage Temperature	T_{stg}	-55 to + 150	$^{\circ}C$

Electrical Parameters (T=25 $^{\circ}C$)

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_F	Forward Current
V_F	Forward Voltage @ I_F



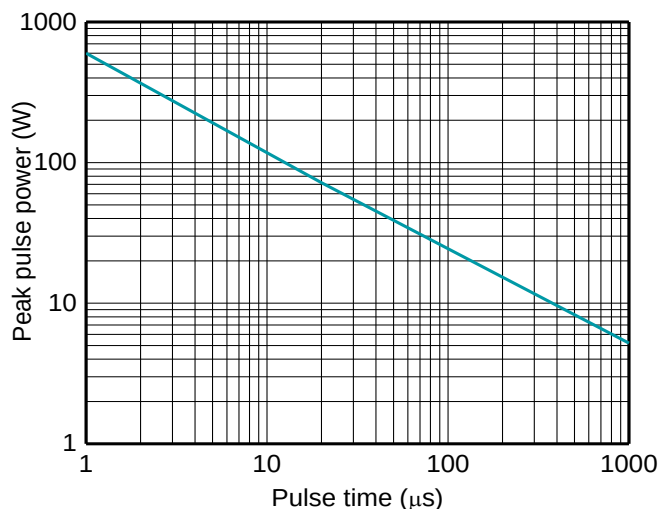
Electrical Characteristics

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage	V_{RWM}		-1		1	V
Reverse Leakage Current	I_R	$V_{RWM}=\pm 1V$			0.2	μA
Reverse Breakdown Voltage	V_{BR}	$I_T=10mA$	1.4			V
Clamping Voltage	V_C	$I_{PP}=4A, t_p=8/20\mu s$			6	V
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$		0.35		pF

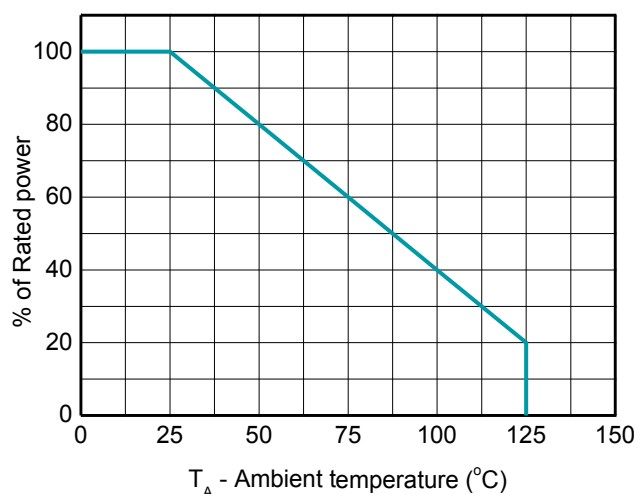
Note1: ESD Pulse Waveform according to IEC 61000-4-2. see Table1 and Figure4.

Note2: ESD tests Setup see Figure 5.

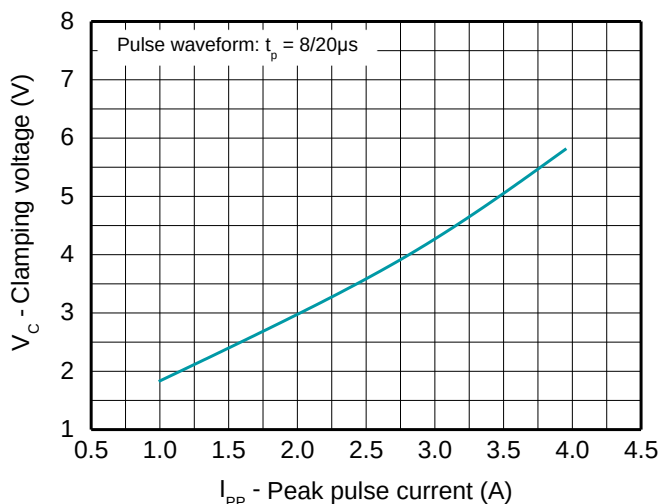
Typical Characteristics



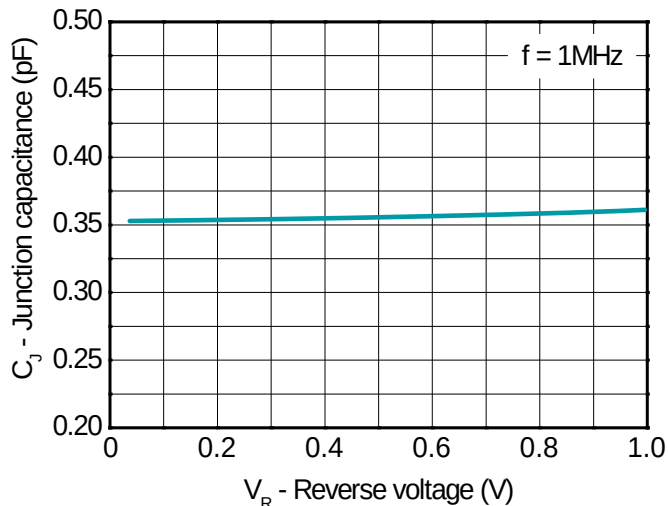
Non-repetitive peak pulse power vs. Pulse time



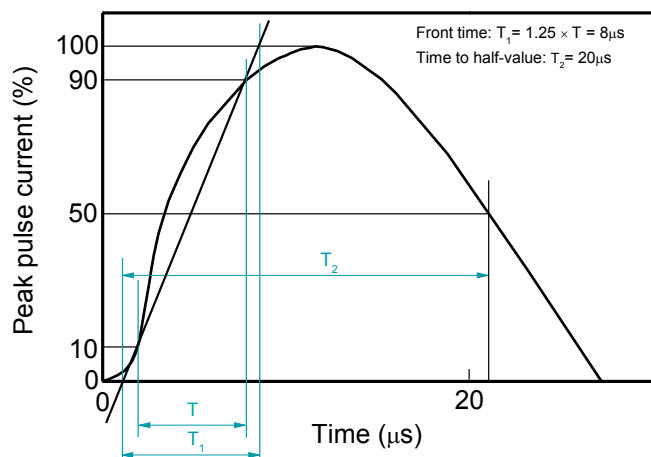
Power derating vs. Ambient temperature



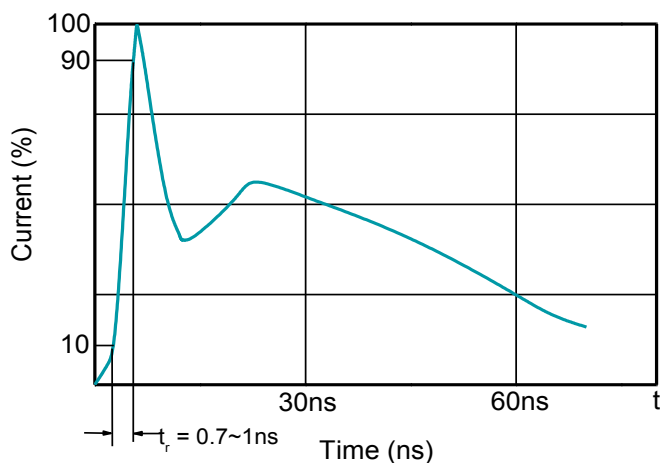
Clamping voltage vs. Peak pulse current



Capacitance vs. Reverse voltage



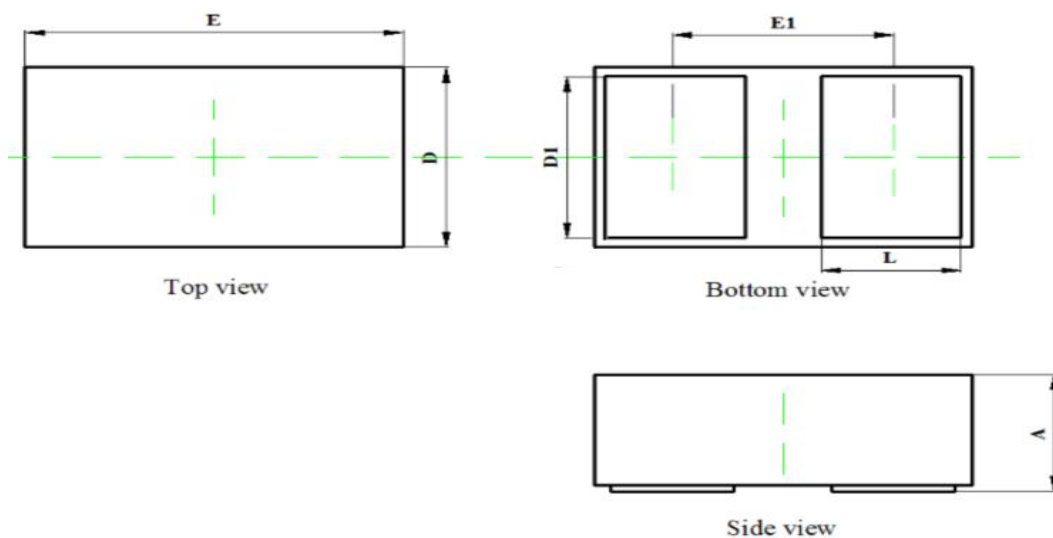
8/20μs waveform per IEC61000-4-5



Contact discharge current waveform per IEC61000-4-2

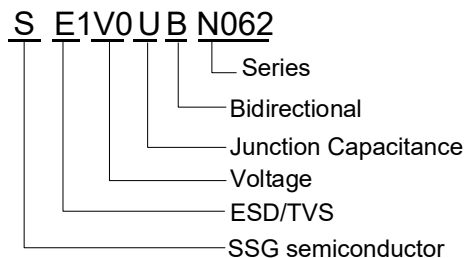
Package Outline Dimensions

DFN0603 Package Outline



Symbol	Dimensions In Millimeters		
	Min	Typical	Max
A	0.26	0.32	0.35
D	0.25	0.30	0.35
E	0.55	0.60	0.65
D1	0.20	0.25	0.30
E1		0.35	
L	0.13	0.18	0.23

Part Numbering System



Device	Package	Shipping	MarKing	Parameter
SE1V0UBN062	DFN0603-2L	10000/Tape&Reel	1 *	1 = Product Code C = Device Code